

COMMONWEALTH OF MASSACHUSETTS

DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY

Investigation by the Department of Telecommunications and Energy on its own Motion into the Appropriate Pricing, based upon Total Element Long-Run Incremental Costs, for Unbundled Network Elements and Combinations of Unbundled Network Elements, and the Appropriate Avoided Cost Discount for Verizon New England, Inc. d/b/a Verizon Massachusetts' Resale Services in the Commonwealth of Massachusetts

D.T.E. 01-20

Part A (UNE Rates)

**AT&T'S INITIAL BRIEF AFTER EVIDENTIARY HEARINGS ON
RECONSIDERATION**

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Introduction.

In an order dated September 24, 2002, the Department granted motions for reconsideration in part. It requested additional evidence on three issues related to forward-looking unbundled switching costs, and one additional issue concerning forward-looking collocation power costs. Specifically, the Department decided that it would accept and consider additional evidence to help it decide whether to change its substantive determination with respect to the following four issues: (i) the correct forward-looking price for new switches; (ii) Verizon's claim that the Department failed to account for initial right-to-use ("RTU") fees that Verizon incurs when it purchases new switches; (iii) the proper forward-looking ratio of new switches to growth equipment that should be assumed for the purposes of a TELRIC analysis; and (iv) the forward-looking DC power distribution cable length.

AT&T respectfully submits these initial comments regarding the additional evidence presented on these four issues in the form of pre-filed testimony, discovery responses, and cross-examination of witnesses in hearings that took place on October 22 and 23, 2002.

Argument.

I. SWITCHING.

A. Switch Hardware Prices: The Evidence Confirms That the New Switch Price Discount Assumed by the Department Results in Costs Per Line That Are Roughly Five Times Too High.

AT&T has moved for reconsideration of the prices assumed by the Department for new Nortel and Lucent switches in a forward-looking network. The additional evidence presented to the Department on reconsideration confirms that AT&T's motion on this point is well founded. The evidence demonstrates that the forward-looking price that Verizon actually pays for new switches is about 20 percent of the level assumed by the Department.

1. Although the Department's Final Order Should Specify the Price Discount Inputs to SCIS, Some of the Analysis on Reconsideration Must Be Done by Looking at Switch Hardware Cost Per Line.

At the recent hearings on reconsideration, the Department sought clarification regarding whether it should focus on the proper forward-looking assumption regarding a price discount percentage for new switching, or on the proper forward-looking switch hardware price per line.¹

The actual costing methodology followed by Verizon was to input assumed price discounts for Nortel and Lucent into the SCIS model, which was used to generate total uninstalled switch hardware investment estimates.² Those total switch hardware investments can readily be converted to a price per non-ISDN line, simply by dividing the total by the number of access lines to be served. Verizon then uses the total switch hardware investment figures as inputs to its switching cost study. It divides the estimated investment by forward-looking busy hour traffic to develop a hardware cost per minute of use, to which it applies various factors to account for costs such as installation and power.³

Thus, in principle the Department could either: (i) order Verizon to use a particular price discount assumption in SCIS, as the Department did in its original Inputs Order; (ii) order Verizon to assume a particular switch hardware price per line, and run SCIS with whatever price discount assumption will result in that hardware price per line result; or (iii) skip SCIS altogether and order Verizon to use, as the input to its cost study workpapers, total switch hardware costs equivalent to a specified price per line.⁴

AT&T recommends that the Department continue to give Verizon specific instructions regarding what price discount assumptions to use – option (i) – or first derive and then use –

¹ Tr. Vol. 20, 10/23/02, at 3803.

² Ex. Vz-37, Workpaper Part C-2, Page 1.

³ E.g., Ex. Vz-37, Workpaper Part C-1, Page 1.

option (ii) – as inputs to SCIS.⁵ This will ensure that the final compliance filing produces reasonable results without requiring Verizon to restructure the mechanics of its switching cost study. However, to determine what price level is reasonable the Department will need to evaluate evidence regarding equivalent switch hardware prices on a per line basis. That is how switch vendors make bids for the sale of new switches. They bid prices that are evaluated on a per line basis. Vendors do not bid on the basis of price discounts, because the undiscounted list prices have become quite meaningless.⁶ For this reason, much of the evidence we have been able to drag out of Verizon has been made available in the form of switch hardware costs per line.

As discussed below, the evidence regarding what Verizon actually pays for new switches on a per line basis is consistent with the available evidence regarding the price discounts that correspond to those switch discounts.

2. The Price Discount for New Nortel Switches Is Substantially Higher (Yielding a Substantially Lower Hardware Price Per Line) Than Assumed by the Department.

The Department was “not persuaded by Verizon’s argument that ... its contract price for Nortel switching equipment [is] reasonably representative of forward-looking efficient switching costs.”⁷ However, the Department nonetheless used that contract price because it could not discern in the record what alternative number to use.⁸ When the SCIS model as configured by Verizon is run using the <Begin Vz Proprietary> XXXXX <End Vz Proprietary> percent

(continued...)

⁴ Tr. Vol. 20, 10/23/02, at 3757-3760 (Gansert).

⁵ Tr. Vol. 20, 10/23/02, at 3803 (Pitts).

⁶ Switch vendors have continued to raise their list prices year after year, even though the prices that telecommunications companies actually pay for the vendors’ hardware and software has been dropping year after year. Tr. Vol. 20, 10/23/02, at 3804-3805 (Pitts).

⁷ DTE 01-20 at 302.

⁸ DTE 01-20 at 306-307.

discount derived from its regular contract with Nortel and adopted by the Department in its initial Inputs Order, it produces an uninstalled switch hardware price of \$82.62 per line for Nortel switches.⁹ In February 2002, Verizon filed a record request response acknowledging that it actually purchases its new switches through competitive bids, not under its existing contracts. The FCC had asked Verizon to report “[w]hat vendor price switch discount did Verizon obtain” for new switches that it purchased through a competitive bid, and Verizon responded by reporting that it had obtained discounts from Nortel ranging from **<BEGIN Vz PROPRIETARY> XXXXXXXXXX <END Vz PROPRIETARY>** percent.¹⁰

If one takes the lower of these actual new switch discounts as calculated and reported by Verizon, and runs it through Verizon’s SCIS model without making any other changes, the resulting Nortel switch hardware investment comes out to \$17.35 per POTS line for new switches.¹¹ This is for switch hardware or material only, and does not include costs for software or vendor engineering or installation services.

Though Verizon attempted to belittle the \$17.35 per line hardware cost produced by the Nortel new switch discounts actually available to Verizon, these efforts do not stand up to scrutiny. Verizon argued in earlier rounds of briefing that the \$17.35 figure is incorrect, that the proper figure is \$36 per line, that even the \$36 number fails to include numerous additional costs, and that the final switch cost per line is actually “much higher.”¹² Verizon made the further argument that this evidence is unreliable because it comes from “a single switch bid by Nortel,”

⁹ See *DTE 01-20* at 305; Ex. ATT-32, Pitts Direct on Reconsideration, at 11.

¹⁰ See Verizon-VA’s Response to the FCC’s RR VZ-VA-32, in the proprietary attachment to RR-DTE-49S, cited in *DTE 01-20* at 305.

¹¹ Ex. ATT-32, Pitts Direct on Reconsideration, at 10-11.

¹² Verizon’s Reply Brief at 67, dated March 29, 2002; Ex. VZ-61P, Gansert (Mazziotti) Direct on Reconsideration, 10/16/02, at 6-7. See also Verizon’s Reply to the Motions for Reconsideration at 16, dated August 29, 2002.

which involved purported “idiosyncrasies” that resulted in “such an egregious discount.”¹³ But when given the opportunity to prove these assertions with evidence on reconsideration, Verizon was unable to do so. In fact, the evidence shows that every aspect of these representations by Verizon is materially misleading.

(a) For New Nortel Switches, Verizon Receives the Price Discount Shown in RR DTE-49-S (VZ-VA 32).

Verizon concedes that TELRIC rates must be based on material prices that “fully reflect the latest negotiated vendor prices (inclusive of all discounts) currently available to Verizon.”¹⁴ For switching, the relevant prices are what Verizon actually pays for new switches through competitive bids. The undisputed facts show that the much higher Nortel contract price has no probative value regarding what Verizon pays for new switches. This Nortel contract is used only for growth equipment purchases; new switches are purchased through competitive bids, not under this contract.¹⁵

In response to RR DTE-49-S (VZ-VA-32), Verizon indicated that the effective price discounts it received on its most recent purchases of Nortel switches were **<Begin Vz Proprietary> XXXXXXXX <End Vz Proprietary>** percent. The Department asked Verizon to update this information on reconsideration. In response, Verizon cited what it characterized as the “Nortel Discount” for four different switches.¹⁶ This purported update is misleading, in that only one of the four numbers cited is a discount that Verizon actually paid for a new switch purchased through a competitive bid. The first three numbers in this table are not relevant to analyzing the forward-looking price that Verizon can obtain for new switch purchases: the

¹³ Verizon’s Reply to the Motions for Reconsideration at 15-16, dated August 29, 2002.

¹⁴ Ex. VZ-36, Verizon Recurring Cost Panel Direct, at 22.

¹⁵ Tr. Vol. 20, 10/23/02, at 3659-3660 (Gansert); RR DTE-49-S (Verizon-VA’s Response to the FCC’s RR VZ-VA-32).

¹⁶ Ex. Vz-60P, Gansert (Mazziotti) Direct on Reconsideration, 10/2/02, at 14.

numbers for Frederick, MD, and Moorestown, NJ, are from bids that were rejected because the prices were too high; and the number for Pearl Street, NY, was for a switch purchased on an emergency basis to replace the switch destroyed in Manhattan on 9/11/02.¹⁷ Only the last of the four numbers was for a competitive bid with a price low enough actually to be accepted by Verizon. That bid, for Dulles Corner, VA, translates to an effective price discount of **<Begin Vz Proprietary> XXXX <End Vz Proprietary>** percent.

Thus, this updated information actually confirms the continued accuracy of the prior response to RR DTE-49-S. The median and the average of the three price discounts that Verizon reports having obtained from Verizon through competitive bids are **<Begin Vz Proprietary> XXXXXXXXXXXX <End Vz Proprietary>** percent, respectively. This evidence from Verizon confirms that the Department's assumption of **<Begin Vz Proprietary> XXXX <End Vz Proprietary>** percent was in error. As previously noted, this equates to a switch hardware price of approximately \$17.35 per line.

(b) Verizon Previously Confused the Issue by Comparing AT&T's Proof Regarding Uninstalled Switch Hardware Prices to an Erroneous and Overstated Figure of \$36 Per Line.

When Verizon first asserted that \$17.35 per line cannot be correct, because Verizon actually pays \$36 per line for new Nortel switches, Verizon represented that this higher figure could be found on the "standard comparison" sheet for the Eastwick, Pennsylvania switch that was produced in response to RR ATT-3.¹⁸ Verizon asserted that it had paid **<Begin Vz Proprietary> XXXXXX <End Vz Proprietary>** for a switch with a capacity of **<Begin Vz Proprietary> XXXX <End Vz Proprietary>** lines, which amounts to \$36 per line.¹⁹

¹⁷ Tr. Vol. 20, 10/23/02, at 3660 (Gansert); RR DTE-102.

¹⁸ Verizon's Reply Brief at 66-67, dated March 29, 2002.

¹⁹ *Id.*

Because AT&T could not locate any vendor switch bid comparison sheet containing this \$36 figure, AT&T asked Verizon to explain how it derived that number and to provide all supporting documentation. In response, Verizon stated that “the \$36 figure can be found on the Vendor Bid Comparison sheet for Eastwick (100%) in the NTI DMS100 column on the line labeled ‘\$/NAL’”, which “was provided as part of Verizon MA’s response to Record Request ATT-3.”²⁰ In fact, however, this particular vendor bid comparison sheet shows a total switch cost of **<Begin Vz Proprietary> XXXXXX <End Vz Proprietary>**, or **<Begin Vz Proprietary> XX <End Vz Proprietary>** per line, after Nortel’s bid has been adjusted upward to anticipate subsequent costs (which, as explained below, are separately accounted for in Verizon’s cost model).²¹

Now that we know the source material upon which Verizon relies, we can see that this corrected figure of **<Begin Vz Proprietary> XX <End Vz Proprietary>** per line is overstated, because it includes software (and vendor engineering) costs in addition to the switch hardware costs that the Department must separately estimate.²² If one subtracts the various software costs that are covered by Verizon’s RTU factor and should not be included in the switch hardware price input, the result is **<Begin Vz Proprietary> XXXX <End Vz Proprietary>** per line.²³

In sum, the very documentation to which Verizon directs the Department’s attention confirms quite precisely that the price discount disclosed by Verizon in RR DTE-49-S, which translates to a switch hardware cost of \$17.35 per line, is an accurate reflection of what Verizon

²⁰ Ex. ATT-VZ 31-4.

²¹ See Ex. ATT-33P, Pitts Rebuttal on Reconsideration, at 9 and Tab 10 (which reproduces various bid comparison from RR ATT-3).

²² Ex. ATT-32P, Pitts Direct on Reconsideration, 10/2/02, at 13; Ex. ATT-33, Pitts Rebuttal on Reconsideration, 10/16/02, at 12.

²³ This sheet was produced in response to RR ATT-3, and reproduced within Tab 10 to Ex. ATT-33P, Pitts Rebuttal on Reconsideration, 10/16/02. The **<Begin Vz Proprietary> XXXX <End Vz Proprietary>** per line (continued...)

actually pays for new switches. Thus, Mr. Gansert was demonstrably wrong when he asserted that one could not derive the “bottom-line dollars” shown on Verizon’s bid comparison sheets from the effective price discount calculated by Verizon.²⁴

(c) Verizon Compounded its Efforts to Sow Confusion By Making Arguments About “Additional” Costs That In Fact Are Recovered Elsewhere in the Switching Cost Model.

Verizon accuses AT&T of “misus[ing] the discount information because it has failed to take into account the fact that there are numerous additional costs associated with switch purchasing.”²⁵ But the “additional” costs to which Verizon is referring are all recovered elsewhere in Verizon’s cost study: the power-related costs are recovered in the power factor; the engineering, labor, hauling, hoisting, and warehousing costs are all recovered in the EF&I factor; and any fiber distribution panel or DSX terminations are added as separate line items in the cost studies where appropriate.²⁶

Verizon used SCIS to estimate switch hardware costs, which were then used as an input to Verizon’s switch-cost model. The switch hardware costs taken from SCIS and used as inputs to Verizon’s cost model were not intended by Verizon to include power costs, EF&I costs, or any of the other items that are recovered separately in factors that within Verizon’s cost model are applied to the hardware prices.²⁷

Thus, AT&T is not “misusing” the price discounts that Verizon, by its own reckoning, receives on new switch purchases. Those discounts accurately reflect the prices that Verizon

(continued...)

figure is derived as follows: <Begin Vz Proprietary> XXXXXX XXXXXX XXXXXX XXXXXX <End Vz Proprietary>.

²⁴ Tr. Vol. 20, 10/13/02, at 3743 (Gansert).

²⁵ Ex. Vz-60, Gansert (Mazziotti) Direct on Reconsideration, 10/2/02 at 14. *See also*

²⁶ Ex. ATT-VZ 31-38; Tr. Vol. 20, 10/23/02, at 3663 *et seq.* (Gansert). *See also* Verizon’s Reply to Motions for Reconsideration, 8/29/02, at 16.

²⁷ Tr. Vol. 20, 10/23/02, at 3670-3671 (Gansert).

pays for new switch hardware, excluding software, installation, and the various other costs that are accounted for separately in the Verizon cost model.

(d) The Chester or Eastwick Price Discounts from RR DTE-49-S Are Not “Isolated”.

Verizon also tries to dismiss the price discount that equates to a switch hardware price of \$17.35 per line as *sui generis*. Verizon asserts that “[t]he implied discount on material contained within a discrete bid on a single switch is meaningless outside the context of that bid.”²⁸ Verizon’s claim that this price is “isolated,” and its implication that the discount is unrepresentative, cannot be squared with the facts.

Competitive bids across 16 different switches show total costs – including switch hardware, software, and vendor engineering and installation – of almost exactly the \$36 per line to which Verizon has repeatedly admitted.²⁹ Since telecommunications in general and switching in particular continue to experience declining costs, these numbers from the past several years overstate the forward-looking costs that Verizon should be expected to face for new switches. Indeed, this is confirmed by Verizon itself. Verizon has made clear that given continuing “improvement in cost, quality, and service,” on a forward-looking basis Verizon expects to pay no more than **<Begin Vz Proprietary> XXX <End Vz Proprietary>** per line for switching, again including all hardware, software, and vendor engineering and installation costs.³⁰

As discussed above, in order to evaluate switch hardware prices one must look not just at the bottom line from Verizon’s own vendor switch bid comparison sheets, but must separate the hardware and software costs reflected in the relevant bids. The proprietary spreadsheet attached

²⁸ Ex. Vz-61, Gansert (Mazziotti) Rebuttal on Reconsideration, 10/16/02, at 7.

²⁹ Ex. ATT-33P, Pitts Rebuttal on Reconsideration, 10/16/02, at 10 & Tab 10.

³⁰ Ex. ATT-33-P, Pitts Rebuttal on Reconsideration, 10/16/02, at 11 & Tab 11 (collecting letters produced by Verizon in Ex. ATT-VZ 31-1).

to this brief at Tab 1 does just that. It takes the same bid comparison sheets that have been produced and were referred to at page 10 of Ms. Pitts' rebuttal testimony on reconsideration, and summarizes the information from each switch bid in more detail. This recompilation demonstrates that on average Verizon can purchase new Nortel switches for a price of **<Begin Vz Proprietary> XXX <End Vz Proprietary>** per line, including switch hardware and vendor EF&I costs, but excluding separately priced software costs that are recovered through the RTU factor.

Verizon's vendor switch bid comparison sheets also prove that Verizon is able to obtain lower prices for switch hardware, on a per line basis, when it purchases more switches.³¹ This unsurprising result was confirmed on cross-examination by Mr. Gansert, who explained that "typically either prices decrease as the volumes go up or they reach a point, more likely, at a certain level where they don't change, where a certain market share, they won't decrease pricing in answer to market share."³²

In an effort to deflect attention from this undisputed evidence, Verizon repeats yet again its tired argument that switch vendors could not possibly supply roughly 130 new switches all at once for Massachusetts.³³ But this is a bald attempt to roll out Verizon's failed analogy to the Bridgestone/Firestone recall, with no more common sense or evidentiary support than before when it was properly rejected by the Department.³⁴ As before, Verizon has again presented no evidence that Nortel and Lucent would be incapable of fulfilling an order for all new switches in Massachusetts. Verizon's assertion to the contrary is based on pure conjecture, not proof. Furthermore, this argument remains irrelevant as a matter of theory. Under TELRIC, one uses

³¹ Ex. ATT-32-P, Pitts Direct on Rebuttal, 10/2/02, at 14-15.

³² Tr. Vol. 20, 10/23/02, at 3751 (Gansert).

³³ Ex. Vz-60, Gansert (Mazziotti) Direct on Rebuttal, 10/2/02, at 13.

the best available marginal pricing per unit and applies it to the long-run construct defined by the FCC under standard economic pricing theory to develop forward-looking cost estimates. This is what Verizon claims that it has done with respect to outside plant. It says that it uses the actual material investment prices reflected in its records, or provided by the vendor, to reflect the actual best prices that Verizon currently pays.³⁵ There is no basis for treating switching material prices differently.

(e) The Higher EF&I Factor Sought By Verizon is Predicated On Use of New Switch Price Discounts Equivalent to Hardware Costs of \$17.35 Per Line.

Verizon has moved for reconsideration of the EF&I factor of 0.29 that the Department adopted; Verizon advocates that the Department substitute a new EF&I factor of 0.6376 as shown in RR DTE-49-S (VA-VZ 40).³⁶ Verizon has not provided any backup for this much higher EF&I factor, and thus has failed to meet its burden of proving that it would be appropriate even if the Department were to reconsider its original conclusion.

For present purposes, however, it is important to recognize the implications of Verizon's EF&I claim for the Department's reconsideration of switch hardware prices. According to Verizon, the EF&I factor of 0.6376 was derived from undisclosed data related to the same new switches for which Verizon previously disclosed the effective price discounts. Thus, even if the Department were to accept Verizon's arguments for a higher EF&I factor, internal consistency requires that the new EF&I factor proffered by Verizon be accompanied by adoption of the corresponding hardware price discount for the same switches.

(continued...)

³⁴ DTE 01-20 at 307.

³⁵ Ex. VZ-36, Verizon Recurring Cost Panel Direct, at 22.

³⁶ See Verizon's Motion for Reconsideration at 7.

Analyzing the switch price information together with Verizon's EF&I claims, in order to ensure consistency, makes clear that the Department's initial conclusions resulted in a substantial **overstatement** of EF&I costs. This can be seen by expressing those costs on a per line basis. Under the Department's initial Inputs Order, switch hardware costs of \$82.62 per line and an EF&I factor of 0.29 yield EF&I costs per line equal to \$23.96. In contrast, applying the much higher EF&I factor now sought by Verizon (0.6376) to the corresponding price per line for new switch hardware (\$17.35) yields EF&I costs per line of only \$11.06. This is the total EF&I cost that according to Verizon it is actually achieving over the past several years on new switch purchases.

3. On a Forward-Looking Basis, Verizon Will Receive Roughly the Same Hardware Price per Line for Lucent Switches as from Nortel.

Lucent and Nortel compete against one another for Verizon's business, which permits Verizon "to insure that neither vendor will engage in unreasonable or non-competitive licensing practices."³⁷ Verizon is able to use the competitive bidding process to make sure that neither vendor is able to charge more than the other for new switches. Indeed, "the main reason that Verizon MA realizes the switch discounts it does is the fact that Verizon MA has been successful in positioning one switch vendor against the other."³⁸

It would therefore be unreasonable for the Department to assume that Verizon would pay more for new switches from Lucent on a per line basis than it pays for new switches from Nortel. Instead, Verizon would be expected to position Nortel against Lucent, and get the competitive, market price from both vendors. As the Department has already found, "[t]he substantially lower cost of Nortel switches shown in Verizon's proposed cost study undermines Verizon's reliance

³⁷ Tr. Vol. 20, 10/23/02, at 3662 (Gansert).

³⁸ *Id.*

on [much higher] Lucent switch costs in a forward-looking efficient cost study.”³⁹ In other words, the assumption of a substantial difference in switch material prices per line between Lucent and Nortel switches “is not rational and does not accurately reflect the pricing that exists in the highly competitive switch vendor market.”⁴⁰

In sum, the forward-looking discounted price for new switches from Lucent would be comparable to that from Nortel.

B. Initial RTU Fees: The Evidence Shows that the RTU Factor Should be Decreased, Not Increased.

Verizon has sought reconsideration of the RTU factor, arguing that the Department failed to take into account the initial RTU fees that are paid when a new switch is purchased. Verizon previously proposed, and convinced the Department to adopt, an RTU factor of 0.0197, as set forth in Part G-9 of Verizon’s cost study. Verizon now claims that this factor should be increased to 0.0699 to account for initial RTU fees.⁴¹ But this claim cannot be squared with the evidence, which actually shows that the RTU factor should be *decreased* to 0.0179.

On reconsideration, the Department directed Verizon to provide “testimony and comprehensive supporting documentation regarding estimates of the cost of RTU fees associated with initial switches, based on Verizon’s recent purchases of software packages associated with Nortel and Lucent switches (i.e., from 2000 and 2001).”⁴² Verizon has failed to comply with this directive, and has not met its burden of proving that any increase in the RTU factor is warranted.

³⁹ DTE 01-20 at 306.

⁴⁰ Ex. ATT-20, Pitts Revised Rebuttal at 20.

⁴¹ Ex. DTE-VZ 3-4.

⁴² D.T.E. 01-20, Order Granting Verizon and AT&T Motions for Reconsideration, in Part, and Requesting Additional Evidence, at 9.

The incomplete set of numbers cobbled together by Verizon does not demonstrate what it pays for initial RTU fees when it buys new switches through competitive bids.⁴³ The Nortel bids for the Frederick and Moorestown switches were rejected because Verizon could get the needed hardware and software for less from another vendor.⁴⁴ As noted above, the figures for the Pearl Street have little probative value because they concern a switch bought on an emergency basis, not through competitive bid, immediately after 9/11/02. The initial RTU number presented for the Dulles Corner switch appears to be accurate, but it is materially higher than the average RTU fee charged by Nortel for new switches, as explained below.

Turning to Lucent switches, the one number presented by Verizon was concocted for litigation and has no basis in reality. Verizon did not pay that amount to Lucent as an initial RTU fee, and never purchased initial switch software at that price.⁴⁵ To the contrary, Verizon concedes that Lucent actually charges either nothing or a very small fee for the initial software provided with a new switch.⁴⁶ “In general, there's zero software costs indicated in the bid sheets” for new switch purchases from Lucent.⁴⁷ This makes perfect sense. Switch vendors long ago fully recovered their software costs, and thus have “have the discretion fundamentally to charge anywhere from zero to what they believe they can competitively bid.”⁴⁸ Mr. Gansert stressed this fact: “Remember, they have zero incremental cost for the software; they have no cost.”⁴⁹

⁴³ See Ex. Vz-60-P, Gansert (Mazziotti) Direct on Reconsideration, 10/2/02, at 4-5.

⁴⁴ Ex. ATT-33-P, Pitts Direct on Reconsideration, 10/2/02 at 3-4.

⁴⁵ Tr. Vol. 20, 10/23/02, at 3708 (Gansert); Ex. ATT 33-P, Pitts Rebuttal on Reconsideration, 10/16/02, at 5-7.

⁴⁶ Tr. Vol. 20, 10/23/02, at 3696 (Gansert).

⁴⁷ *Id.*

⁴⁸ Tr. Vol. 20, 10/23/02, at 3698 (Gansert).

⁴⁹ Tr. Vol. 20, 10/23/02, at 3723 (Gansert).

The proprietary spreadsheet attached to this brief at Tab 1 compiles the initial RTU fees that Verizon has actually paid for new switches. Those fees averaged **<Begin Vz Proprietary> XXXXXX <End Vz Proprietary>** for Nortel switches and **<Begin Vz Proprietary> XXXXX <End Vz Proprietary>** for Lucent switches. Verizon tried to derive a new RTU factor using its disproven assumptions regarding what it pays for initial RTU fees. If one takes that analysis and redoes it using these actual, average initial RTU fees paid by Verizon when buying new switches, the result is a reduction in the RTU factor to 0.0179, as shown on page 2 of the spreadsheet attached hereto at Tab 2.⁵⁰ Of course, this will make sense only if the Department revises its assumption regarding the price for new switch hardware to equal \$17.35 per line. If the Department instead uses a flawed, higher switch hardware cost, then that cost will already encompass all initial RTU fees and it would be improper double counting to include them a second time in the RTU factor.⁵¹

C. New to Growth Ratio: There Is No Basis for Altering the 90:10 Ratio of New Switches to Growth Equipment Adopted by the Department.

Verizon has also moved for reconsideration of the Department's finding that under TELRIC the forward-looking mix of switching equipment would consist of 90 percent new switches and 10 percent growth equipment. Verizon proposes that the Department instead adopt a new-to-growth ratio of 50:50, or at most 65:35, based on what it inaccurately calls a "life-cycle" analysis of switch purchases. In fact, neither the five-year version of this analysis in RR DTE-66 nor the ten-year version in DTE-VZ 3-7 is meaningful, accurate, or at all relevant to a TELRIC analysis.

⁵⁰ See spreadsheets attached to this brief as Exhibit 2. The first page replicates Verizon's flawed analysis from Ex. DTE-VZ 3-4. The second page starts with Verizon's new analysis, and revises it by substituting the actual RTU fees paid by Verizon for new switches in lieu of the inflated and unsupported figures assumed by Verizon. The third page demonstrates the factor that would result if, for some reason, the Department failed to reduce the switch hardware prices to the level of \$17.35 per line, which is needed to exclude all software costs from this figure.

The Department correctly found that under TELRIC its job is “to estimate the costs of a new network ‘dropped in place’ to serve current demand and reasonably foreseeable capacity requirements.”⁵² Verizon has not sought reconsideration of this fundamental point. To the contrary, Verizon admits that the “dropped in place” concept that is central to TELRIC requires that forward-looking switching costs be estimated under the assumption that an entirely new array of switching equipment will be deployed in existing central offices, “without regard to any existing switch equipment inventory.”⁵³

Consistent with these fundamental principles, the AT&T/WorldCom switching witness previously had prepared an analysis demonstrating that in a forward-looking network matching the TELRIC construct one would expect 90 percent of aggregate switching capacity to be purchased as new switches, and the remaining 10 percent to be purchased as higher-priced growth equipment to augment switching capacity over the economic life of the switches.⁵⁴ If this analysis is updated to reflect the Department’s decisions to date regarding cost of capital, depreciation lives, and projected annual line growth, the result changes slightly to a ratio of 92.17 : 7.83.⁵⁵ If the Department follows Verizon’s suggestion and takes into account the ability of Verizon to purchase three years of growth capacity at new switch prices, rather than a year and a half,⁵⁶ the ratio increases a little more to 93.82 : 6.18. Verizon concedes that “the mathematical analysis underlying Ms. Pitt’s calculation is accurate.”⁵⁷

(continued...)

⁵¹ See Ex. ATT-33-P, Pitts Direct on Reconsideration, 10/2/02 at 5.

⁵² DTE 01-20, at 22.

⁵³ Ex. Vz-61-P, Gansert (Mazziotti) Rebuttal on Reconsideration, 10/16/02, at 3.

⁵⁴ RR DTE-56.

⁵⁵ Ex. ATT-32P, Pitts Direct on Reconsideration, 10/2/02, at 4-6 & Tab 1.

⁵⁶ Ex. Vz-61, Gansert (Mazziotti) Rebuttal on Reconsideration, 10/16/02, at 5-6.

⁵⁷ Ex. Vz-61P, Gansert (Mazziotti) Rebuttal on Reconsideration, 10/16/02, at 5.

The Department previously, and correctly, found that this analysis is consistent with TELRIC and its key dropped in place assumption.⁵⁸ The AT&T/WorldCom switching witness has demonstrate that this analysis is consistent with the Department's other findings. This is significant. "When we determine UNE rates, it is of critical importance to maintain consistency between assumptions that affect multiple UNEs. A party in this case should not be able to pick and choose different assumptions for different UNEs, depending on whether the assumption produces results favorable to its position."⁵⁹ The Department has emphasized its "longstanding principle that Verizon's forward-looking network assumptions should be consistent across all UNEs."⁶⁰

Indeed, the Department's 90/10 ruling is consistent with the testimony of Verizon's own switching witness. Ms. Matt testified, on two different hearing days, that under TELRIC the proper way to determine the mix of new switches and growth parts would be to begin by modeling all new switches, and then at the end of the planning period augment the switch capacity with growth parts.⁶¹ Verizon's witness emphasized her agreement with the AT&T/WorldCom witness on this point.⁶² The Department followed just such an analysis in reaching its well-supported conclusion that Verizon must base its switching costs on a 90/10 mix of outlays for new switches and switching growth parts.⁶³

In contrast, the competing construct proffered by Verizon, whether in its original five-year form or in its newly expanded 10-year form, is inconsistent with TELRIC and was properly

⁵⁸ *DTE 01-20*, at 300-302.

⁵⁹ D.T.E. 01-20 Inputs Order at 131.

⁶⁰ D.T.E. 01-20 Inputs Order at 160.

⁶¹ Tr. 8, at 1627-1628, 1/24/02 (Matt); Tr. 12, at 2357-2358, 1/31/02 (Matt).

⁶² Tr. 12, at 2358, 1/31/02 (Matt) ("I think that's what Ms. Pitts was suggesting, also, to you. So I think we're in agreement there.").

⁶³ *D.T.E. 01-20*, at 301-302.

rejected by the Department.⁶⁴ (On reconsideration, Verizon makes no effort to defend, and has essentially abandoned, its original assumption of essentially 100 percent growth equipment pricing.)

In the original five-year version, Verizon took its total number of new access lines from 1996 to 2000 and assumed that they were all served by switching growth equipment, and compared them to the number of lines in new switches bought during this period, to derive a 50:50 ratio.⁶⁵ Verizon claims that this calculation reflects the mix of new switches and growth equipment that it would purchase “over the actual life a switching technology,” and for that reason calls its calculation a “life cycle” analysis.⁶⁶ But calling Verizon’s partial and misleading calculation a “life cycle” analysis does not make it one, any more than one can turn a pig into a fairy godmother by changing its name.

The life cycle for digital switches began in 1984 or 1985.⁶⁷ Roughly 69 percent of Verizon’s old analog switches had been replaced with digital switches prior to 1993.⁶⁸ ARMIS data available online through the FCC shows that in the old Bell Atlantic-North f/k/a NYNEX territory 88.51 percent of access lines were served on digital switches by 1995, and that in the old Bell Atlantic-South 81.8 percent of lines were on digital switches by that time. Thus, the five-year snapshot reflected in RR DTE-66 falls not long after the period when Verizon-East had replaced most of its old analog switches with new digital switches. Any analysis of switch purchasing during that brief historic period merely tells us the obvious, that for a five-year stretch after a period of widespread switch replacement a telecommunications carrier will have

⁶⁴ *Id.*

⁶⁵ RR DTE-66; Tr. Vol. 20, 10/23/02, at 3690 (Gansert).

⁶⁶ Ex. Vz-60, Gansert (Mazziotti) Direct on Reconsideration, 10/2/02, at 9.

⁶⁷ Tr. Vol. 20, 10/23/02, at 3739 (Gansert).

⁶⁸ Tr. Vol. 20, 10/23/02, at 3694 (Gansert).

no need to buy lots of new switches. This arbitrary calculation – even if accurate on its face, which it is not for reasons discussed below – merely “captures a five-year snapshot of Verizon’s embedded network” that tells the Department nothing about the deployment of switches in a forward-looking network assumed to be dropped in place under the TELRIC construct.⁶⁹

At the Department’s request, Verizon redid these same calculations over a ten year period from 1990 to 2001.⁷⁰ This produced a claimed ratio of 65 percent new switch lines to 35 percent growth equipment lines.⁷¹

There are at least two reasons why this higher new-to-growth ratio is still irrelevant, and still understates the appropriate relationship in a forward-looking, TELRIC-compliant network.

First, even on its own terms this analysis is flawed, and understates the ratio of new switch to growth equipment purchases post-1990. Verizon appears to understate the capacity of new switches it purchased during this period, by reflecting only the total number of “lines at cut” (*i.e.*, at the moment service is cutover to the replacement switch) and ignoring the spare capacity purchased with the new switch.⁷² Verizon also overstates the scope of the growth equipment it had to purchase, by making the unproven and improbable assumption that all new access lines were served through growth equipment and none were served through capacity bought as part of a new switch.⁷³ In fact, however, the additional access lines enumerated on this spreadsheet may have been served either through spare capacity available from prior new switch purchases, through spare capacity in new switches bought during the time period, or to some extent through capacity bought as growth equipment.⁷⁴ It is quite likely, therefore, that the actual ratio of new

⁶⁹ *D.T.E. 01-20* at 301.

⁷⁰ Ex. Vz-60P, Gansert (Mazziotti) Direct on Reconsideration, 10/2/02, at 12.

⁷¹ Ex. DTE-VZ 3-7.

⁷² Ex. DTE-VZ 3-7, Workpaper B (using “lines at cut” to tally “new switch” lines).

⁷³ Tr. Vol. 20, 10/23/02, at 3692 (Gansert).

⁷⁴ *Id.* at 3690-3692.

switch capacity to switching growth equipment capacity purchased by Verizon during this period was higher than 65:35. Maybe it was 70:30, maybe it was 80:20. There is no way to know, because Verizon has not proven its claim.

Second, in any case this additional calculation still does not come close to being a life-cycle analysis, but instead is again a snapshot (taken with a slightly wider angle lens). As of 1991, according to the oldest ARMIS data available online through the FCC, 55 percent of access lines in the Bell Atlantic-South region and 61 percent of the lines in Bell Atlantic-North were served by digital switches. Thus, even going back to 1990 permits Verizon to ignore most of its new switch purchases during its conversion from analog to digital switches.

When Verizon extended its snapshot analysis from five-years to ten-years its flawed calculation rose from 50:50 to 65:35, and most certainly should have risen further. If Verizon had extended its analysis to something approaching a true life cycle for digital switching, and had presented accurate and complete data, this ratio probably would have approached the 90:10 ratio that the Department determined was appropriate for a forward-looking TELRIC analysis.

To be clear, Verizon's snapshot analysis – inaccurately described as a “life cycle” analysis when it is actually nothing of the sort – is irrelevant to a TELRIC analysis. It nonetheless provides further evidence that the 90:10 ratio calculated by the Department is accurate and appropriate for TELRIC purposes.

II. COLLOCATION - THE CABLE LENGTH ADOPTED BY THE DEPARTMENT IN ITS INPUTS ORDER IS THE MAXIMUM LENGTH OF A FORWARD-LOOKING NETWORK DESIGN.

In its *Order Granting Verizon and AT&T Motions for Reconsideration*, the Department determined that Verizon's admitted misstatements about the distribution power cable length require that “the Department and other parties...have the opportunity to examine the support for

Verizon's original 121-foot proposal."⁷⁵ Verizon, however, fails to provide *any* additional support for its proposed 121-foot cable length between the Battery Distribution Fuse Bay ("BDFB") and a CLEC collocation arrangement in the metro density zone.⁷⁶ Verizon has failed to meet its burden of proof on this issue. Verizon requests that the Department double the 60.5 feet adopted in the Inputs Order without producing a single shred of evidence – either in its original case or in its case on reconsideration – that its proposed cable length represents a forward looking design.⁷⁷ Verizon relies solely on its year 2000 study of 70 collocation jobs, which shows that the cable that it happened to install during that year had an average distance of 121 feet in metro central offices.⁷⁸ By contrast, AT&T presented affirmative evidence in its case on reconsideration demonstrating that a forward-looking cable length is 55 feet, and not anything greater than the 60.5 feet the Department determined in its Inputs Order. In addition, AT&T's evidence on reconsideration demonstrates that the cable lengths Verizon uses for its own equipment is half that proposed by Verizon in this case.

The Department should reject Verizon's proposed cable length for three principal reasons. First, it violates TELRIC. The cable lengths Verizon uses to compute its Distribution Rate element reflect cable jobs Verizon performed in its existing central offices in 2000, and Verizon makes no forward-looking adjustments, to those cable distances.⁷⁹ Second, adoption of Verizon's proposal would produce discriminatory cable lengths, with Verizon cable lengths assumed to be half that of cable used to distribute power to CLEC collocation equipment.

⁷⁵ *Order Granting Verizon and AT&T Motions for Reconsideration, In Part, and Requesting Additional Evidence*, D.T.E. 01-20 (September 24, 2002), at 14.

⁷⁶ Verizon did not file direct testimony on reconsideration and its rebuttal testimony on reconsideration simply responds to the direct testimony of Steven Turner, and does not offer any affirmative support for its proposed cable lengths.

⁷⁷ *DTE 01-20*, at 425-426.

⁷⁸ Ex. VZ-62, Clark/Gushue Rebuttal on Reconsideration, at 15; Tr. Vol. 19, 10/22/02, at 3584-3585 (Clark).

⁷⁹ Tr. Vol. 19, 10/22/02, at 3602 (Clark).

Verizon's proposal would therefore produce rates that discriminate against CLECs. Third, Verizon's responses to discovery on reconsideration show that Verizon double recovers the cost of the same cable length in both the Power Consumption and Power Distribution rate elements.

Because Verizon's cable distances violate the TELRIC assumption of a brand new, efficiently designed network and because they are twice that of its own cable lengths, the Department should adopt the 55-foot cable distance originally recommended by Steven Turner and confirmed by Mr. Turner's recent review of the distances between Verizon's telecommunications equipment and Verizon's BDFBs in Massachusetts central offices.⁸⁰ In addition, the Department should adopt Mr. Turner's solution to Verizon's double recovery of the cost of distribution cable.⁸¹

A. The Cable Lengths in Verizon's Distribution Rate Element Are Not Based on a TELRIC Configuration of a Central Office and Should Be Rejected as Inconsistent with the Department's Inputs Order.

The distribution cable lengths Verizon continues to press on reconsideration, based solely on inefficiently designed central offices that happened to be laid out with BDFBs quite convenient to Verizon's equipment and relatively far from CLEC collocation cages. It is undisputed that Verizon proposes to charge CLECs for distribution cable lengths based solely on the cable distances in Verizon's embedded network.⁸² The cable lengths that Verizon inputs into its cost study are the same distances found in 70 collocation jobs performed by Verizon in 2000.⁸³ Verizon makes no adjustments to these cable lengths to reflect a forward-looking and

⁸⁰ Ex. ATT-31, Turner Rebuttal on Reconsideration, at 9-10.

⁸¹ Ex. ATT-31, Turner Rebuttal on Reconsideration, at 7.

⁸² Tr. Vol. 19, 10/22/02, at 3602 (Clark); *Verizon Initial Br.*, at 263 ("the existing cable lengths...result from realities of the landscape and engineering realities of the actual central office"); Ex. VZ-62, Clark/Gushue Rebuttal on Reconsideration, at 7 ("real world constraints" determine the length of power cables).

⁸³ Ex. VZ-62, Clark/Gushue Rebuttal on Reconsideration, at 15; Tr. Vol. 19, 10/22/02, at 3584-3585, (Clark).

efficient central office design.⁸⁴ Verizon's distribution costs therefore reflect only Verizon's current practices for adding CLEC equipment to existing central offices. In other words, Verizon's proposal is based exclusively on its existing embedded network.

TELRIC, however, requires that Verizon estimate its collocation costs based on laying out a well-designed central office at the existing location.⁸⁵ This "scorched node" concept assumes only the existing locations of central offices, not their present configuration.⁸⁶ It concerns a new, efficiently designed network dropped in place and using existing central office locations.⁸⁷ In deciding on the appropriate length for power cables, TELRIC therefore requires that Verizon's costs reflect a forward-looking, efficiently designed central office -- not the inefficient layout of BDFBs in Verizon's existing central offices.

The Department should reject Verizon's distribution cable costs as not representative of "efficient practices that would be replicated by Verizon in reconstructing its network."⁸⁸ In constructing a forward-looking, efficient network, Verizon would design a modern central office to serve current and future technology.⁸⁹ Verizon did not layout its existing central offices, some of which are 50 to 60 years old, with collocation in mind.⁹⁰ As result, today's central offices are not efficiently configured to accommodate collocation space. When a CLEC requests space in a central office, Verizon only will assign to that CLEC space not already occupied by working

⁸⁴ Tr. Vol. 19, 10/22/02, at 3602 (Clark).

⁸⁵ *DTE 01-20*, at 22-23; Tr. Vol. 19, 10/22/02, at 3602 (Conklin);

⁸⁶ *In the Matter of Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, CC Docket 96-98, First Report and Order, No. FCC 96-325 (released August 8, 1996), ¶ 685.

⁸⁷ *DTE 01-20*, at 22.

⁸⁸ *DTE 01-20*, at 23. ("TELRIC is not a measurement of embedded costs, but that does not mean that all evidence based on current technology or practices is excluded in a TELRIC analysis. To the extent we conclude that current technology or practices represent efficient practices that would be replicated by Verizon in reconstructing its network, that technology or practice is sound evidence to be used in a TELRIC analysis.")

⁸⁹ Tr. Vol. 6, 1/22/02 at 1090 (Clark).

⁹⁰ Tr. Vol. 6, 1/22/02 at 1088 (Clark).

Verizon equipment.⁹¹ In other words, CLECs currently reside in the leftover space in a Verizon central office. Because of the placement of CLEC equipment in existing central offices *after* the placement of Verizon's equipment, the CLEC cable distances in Verizon's cost study reflect the historic inefficiencies (*i.e.*, the late addition of CLEC equipment) to Verizon's existing central offices. These historic inefficiencies would not exist in a TELRIC configuration of a central office designed from the start to house collocation equipment. Verizon's exclusive reliance on the cable distances found in its year 2000 collocation jobs violates this TELRIC assumption of a brand new, efficiently designed central office and, therefore, the cable distances from the 2000 study should not be used to compute the Power Distribution rate element.

Verizon's discriminatory cable length assumptions confirm that Verizon's existing central offices are not efficiently designed for CLEC equipment. The cable distance between a BDFB and Verizon's own equipment is half the length of the cable distance between a BDFB and CLEC collocation equipment.⁹²

Floor plans for three Verizon Massachusetts central offices in metro density zones show that the average cable distance between a BDFB and *Verizon's* equipment is approximately 50 feet.⁹³ For example, the distance between a BDFB and Verizon's equipment at the Harrison Avenue central office averages 48 feet.⁹⁴ Similarly, Verizon's response to DTE-VZ 3-8, providing the cable distances between a shared BDFB and Verizon's telecommunications equipment, shows that the average cable distance for Harrison Avenue between a shared BDFB and *Verizon's* equipment is 42.9 feet.⁹⁵

⁹¹ Tr. Vol. 9, 10/22/02, at 3582-3583 (Clark and Gushue).

⁹² Tr. Vol. 9, 10/22/02, at 3611 (Turner).

⁹³ Ex. ATT-31-P, Turner Rebuttal on Reconsideration, at 9; Tr. Vol. 9, 10/22/02, at 3610-3611 (Turner).

⁹⁴ Tr. Vol. 9, 10/22/02, at 3610-3611 (Turner).

⁹⁵ Tr. Vol. 9, 10/22/02, at 3610-3611 (Turner).

In contrast, the average distance between a BDFB and *CLEC* equipment in the metro zone as shown in the Verizon cost study is 121 feet.⁹⁶ The actual distance from a (CLEC-only) BDFB to CLEC equipment at Harrison Avenue is 120 feet.⁹⁷ The below chart, which averages the distances between the BDFB and telecommunications equipment for both Verizon and a CLEC for each density zone provided in response to DTE-VZ 3-8, further illustrates the discriminatory cable distances present in Verizon's existing central offices.

AVERAGE CABLE DISTANCES IN DTE-VZ 3-8

	Verizon Equipment to Shared BDFB	CLEC Equipment to CLEC-Only BDFB
Metro Zone	57.7 feet	103.125 ⁹⁸
Urban Zone	50.6 feet	181 feet
Suburban Zone	88.16 feet	150 feet
Rural Zone	48.1 feet	94.3 feet

These figures demonstrate that it is obvious that Verizon's existing central office configuration for CLEC equipment and the resulting cable distances between BDFBs and CLEC collocation equipment do not reflect the efficiencies Verizon achieves in the placement of BDFBs to serve its own equipment. Upon review of Verizon's central office diagrams, Mr. Turner found that Verizon consistently places BDFBs in a location central to Verizon's own and, therefore, minimizes the cabling distance between the BDFB and its equipment, which efficient engineering dictates.⁹⁹

⁹⁶ Ex. ATT-30, Turner Rebuttal on Reconsideration, at 12; *DTE 01-20*, at 425-426.

⁹⁷ DTE-VZ 3-8, Attachment 1 (Clark); Tr. Vol. 9, 10/22/02, at 3595-3597 (Clark) (all the cable lengths for the metro zone are from CLEC-only BDFBs).

⁹⁸ All collocation arrangements in metro zone central offices had their own BDFBs (not shared BDFBs).

⁹⁹ Ex. ATT-31, Turner Rebuttal on Reconsideration, at 10.

Verizon should use these same efficiencies that it experiences to establish the cost of cable charged to CLECs in the Distribution Rate element.¹⁰⁰ When building a central office from the ground up, as TELRIC requires, Verizon admits that its BDFB guidelines require Verizon to provide CLECs with the same efficiencies that Verizon enjoys in the placement of the BDFB. Verizon's witnesses explain that "Verizon MA's engineers use the same BDFB guidelines and rely on their same professional skill and judgment when placing every BDFB, whether it will serve CLEC equipment exclusively, Verizon MA's own equipment exclusively, or a combination of both CLEC and Verizon MA equipment."¹⁰¹ These Verizon BDFB guidelines provide that "[p]ower cable runs should be designed to be as short and direct as possible for economic and reliability reasons."¹⁰² By relying entirely on the inefficient, existing central offices in Massachusetts to compute CLEC cable distances, Verizon fails to reflect the distances and therefore the costs of an efficiently engineered, least cost, central office as found in the placement of BDFBs to serve Verizon's own equipment.

Verizon attempts to explain the discriminatory distances for which CLECs must pay by pointing to various factors that Verizon engineers take into consideration when determining the placement of a BDFB to serve CLEC equipment.¹⁰³ These factors include: total equipment power requirements, the location of structural supports, HVAC ducts, security guard areas, ingress and egress walkways, and the need to place other central office equipment.¹⁰⁴ Verizon, however, considers the exact same factors when it places a BDFB to serve its own telecommunications equipment.¹⁰⁵ And, when it does, Verizon places BDFBs at distances of

¹⁰⁰ Ex. ATT-31, Turner Rebuttal on Reconsideration, at 10.

¹⁰¹ Ex. VZ-62, Clark/Gushue Rebuttal on Reconsideration, at 8.

¹⁰² ATT-VZ 5-2(l), Attachment 2, page 5 of 15.

¹⁰³ Ex. VZ-62 Clark/Gushue Rebuttal on Reconsideration, at 5.

¹⁰⁴ Ex. VZ-62 Clark/Gushue Rebuttal on Reconsideration, at 5.

¹⁰⁵ Tr. Vol. 9, 10/22/02, at 3576-77 (Gushue).

approximately 50 feet from Verizon's equipment compared to the over 100-foot distances that application of those same factors produce for CLECs.

B. Evidence on Reconsideration Demonstrates That Verizon Double Recovers the Cost of Distribution Cable.

Both Verizon's Power Distribution and Power Consumption rate elements recover the cost of the same length of power cable. Reference to Exhibit ATT-34, which shows the relation of Verizon's power plant to a BDFB to telecommunications equipment,¹⁰⁶ will aid in the following explanation of Verizon's double recovery. (For convenience, Exhibit ATT-34 is attached to this brief at Tab 3, and letters have been added to make references in this brief clearer.)

The Power Consumption rate element recovers the cable cost between the power plant and the BDFB.¹⁰⁷ (See "Distance A" on Ex. ATT-34.) The Power Consumption rate element also recovers the cost of the BDFB itself.¹⁰⁸ As is illustrated on Ex. ATT-34, a BDFB sits among the equipment it serves and, therefore, the cable between the power plant and the BDFB represents the majority of the distance between the power plant and the telecommunications equipment.¹⁰⁹

In Massachusetts, a CLEC sometimes uses its own BDFB and not the BDFB placed by Verizon.¹¹⁰ In the Power Consumption rate element, Verizon weights the CLEC use of a Verizon BDFB and the cable run over Distance "A" at a **<Begin Vz Proprietary> XX <End Vz Proprietary>** percent probability.¹¹¹ Verizon assumes that the CLEC cables directly back to the

¹⁰⁶ Tr. Vol. 9, 10/22/02, at 3586 (Clark).

¹⁰⁷ Tr. Vol. 9, 10/22/02, at 3587 (Clark).

¹⁰⁸ Tr. Vol. 9, 10/22/02, at 3588 (Clark).

¹⁰⁹ Ex. ATT-30, Turner Direct on Reconsideration, at 8; Ex. ATT-31, Turner Rebuttal on Reconsideration at 6.

¹¹⁰ Tr. Vol. 9, 10/22/02, at 3630, 3636 (Turner).

¹¹¹ Ex. ATT-30, Turner Direct on Reconsideration, at 7.

power plant <Begin Vz Proprietary> XX <End Vz Proprietary> percent of the time.¹¹² This means that Verizon does not include the cost of the BDFB or the cable between the BDFB and the power plant (Distance A) in the Power Consumption rate at a <Begin Vz Proprietary> XXX <End Vz Proprietary> percent probability. The bottom line is that <Begin Vz Proprietary> XX <End Vz Proprietary> percent of the cost of “Distance A” and <Begin Vz Proprietary> X <End Vz Proprietary> percent of the cost of the BDFB is included in the Power Consumption rate.

The Distribution rate element recovers both the cost of the cable between the power plant and the telecommunications equipment (Distance B) and the cost of the cable between the BDFB and the telecommunications equipment (Distance C).¹¹³ Yet, as explained above, <Begin Vz Proprietary> XX <End Vz Proprietary> percent the cable distance from the BDFB back to the power plant (Distance A) is already included in Verizon’s consumption element. Thus, in the Distribution Rate element, a CLEC must pay for the cable between the collocation equipment and the power plant (Distance B) as part of the Power distribution rate, even though the CLEC already is paying in the Power Consumption rate element <Begin Vz Proprietary> X <End Vz Proprietary> percent of the cost of the cable between the BDFB and the power plant (Distance A).¹¹⁴ Because “Distance A” and “Distance B” on average are the same distance and cover the same physical ground,¹¹⁵ Verizon double-charges the CLEC.¹¹⁶

In order to reduce, though not completely eliminate, Verizon’s double recovery of cable costs, the Department should apply the same weightings used in the Power Consumption cost

¹¹² Ex. ATT-30, Turner Direct on Reconsideration, at 7-8.

¹¹³ ATT-VZ 30-4 (Clark).

¹¹⁴ Ex. ATT-31, Turner Rebuttal on Reconsideration, at 7.

¹¹⁵ On Ex. ATT-34 “Distance B” appears to be slightly smaller than “Distance A.” However, the “Distance B” shown on Ex. ATT-34 happens to be connecting the collocation arrangement that is closest to the power source. On average, taking all collocation arrangements served by a BDFB, “Distance B” will be equivalent to “Distance A.”

study to the two cable lengths recovered in the Distribution rate element: (1) the cable between the collocation arrangement and the Verizon BDFB (Distance C) and (2) the cable between the collocation arrangement and the power plant (Distance B) (which should be relatively longer).¹¹⁷ Specifically, the distance between the collocation equipment and the Verizon BDFB (Distance C) in the Distribution Rate calculation should be weighted at **<Begin Vz Proprietary> X <End Vz Proprietary>** percent probability consistent with Verizon's **<Begin Vz Proprietary> XX <End Vz Proprietary>** percent weighting of "Distance A" and the BDFB in the Power Consumption rate.¹¹⁸ Similarly, the cable distance between the collocation arrangement and the power plant (Distance B) in the Distribution rate should be weighted at a **<Begin Vz Proprietary> XX <End Vz Proprietary>** percent probability consistent with Verizon's assumption that CLECs cable back to the Verizon power plant **<Begin Vz Proprietary> X<End Vz Proprietary>** percent of the time.¹¹⁹ Based on Mr. Turner's engineering analyses and review of Verizon floor plans, the Department should adopt and weight at **<Begin Vz Proprietary > XXX <End Vz Proprietary >** the one-way cable distance of 55 feet, round trip distance of 110 feet (for battery and return), between the BDFB and the collocation arrangement, and weight at **<Begin Vz Proprietary> XX <End Vz Proprietary>**, the one way cable distance of 165 feet, round trip distance of 330 feet, between the power plant and the collocation arrangement.¹²⁰

(continued...)

¹¹⁶ Tr. 3630, 10/22/02 (Turner).

¹¹⁷ Ex. ATT-31, Turner Rebuttal on Reconsideration, at 7.

¹¹⁸ Ex. ATT-31, Turner Rebuttal on Reconsideration, at 8.

¹¹⁹ Ex. ATT-31, Turner Rebuttal on Reconsideration, at 8.

¹²⁰ Ex. ATT-31, Turner Rebuttal on Reconsideration, at 8.

Conclusion.

AT&T respectfully urges that the Department: (1) compute the forward-looking price for new switches using the new Nortel switch discount disclosed by Verizon in RR DTE-49-S or the equivalent switch hardware price per line of \$17.35; (2) maintain the RTU factor adopted in the Inputs Order or decrease the RTU factor to reflect the evidence presented by Verizon on reconsideration; (3) affirm the 90:10 new-to-growth ratio adopted in the Inputs Order; and (4) adopt 55 feet as the forward-looking cable length between a CLEC collocation arrangement and BDFB, and weight the cable distances used to compute the Power Distribution rate consistent with weightings in the Power Consumption rate element.

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